SEQUENCE LISTING

```
<110>  Fallaux, Frits
       Hoeben, Robert
       Bout, Abraham
       Valerio, Domenico
       van der Eb, Alex
       Schouten, Govert

<120>  PACKAGING SYSTEMS

<130>  2578-3935US

<140>  US/09/356,575
<141>  1999-07-19

<150>  US 08/793,170
<151>  1997-03-25

<150>  PCT/NL96/00244
<151>  1996-06-14

<150>  EP 95201611.1
<151>  1995-06-15

<150>  EP 95201728.3
<151>  1995-06-26

<160>  22

<170>  PatentIn version 3.0

<210>  1
<211>  21
<212>  DNA
<213>  Unknown

<220>
<223>  Derived from Adenovirus

<400>  1
cgtgtagtgt atttataccc g          21


<210>  2
<211>  21
<212>  DNA
<213>  Unknown

<220>
```

<223>   Derived from Adenovirus

<400>   2
tcgtcactgg gtggaaagcc a
      21

<210>   3
<211>   21
<212>   DNA
<213>   Unknown

<220>
<223>   Derived from Adenovirus

<400>   3
tacccgccgt cctaaaatgg c
      21

<210>   4
<211>   20
<212>   DNA
<213>   Unknown

<220>
<223>   Derived from Adenovirus

<400>   4
tggacttgag ctgtaaacgc
      20

<210>   5
<211>   21
<212>   DNA
<213>   Unknown

<220>
<223>   Derived from Adenovirus

<400>   5
gcctccatgg aggtcagatg t
      21

<210>   6
<211>   20
<212>   DNA
<213>   Unknown

```
<220>
<223>  Derived from Adenovirus

<400>  6
gcttgagccc gagacatgtc
     20


<210>  7
<211>  24
<212>  DNA
<213>  Unknown

<220>
<223>  Derived from Adenovirus

<400>  7
cccctcgagc tcaatctgta tctt
     24


<210>  8
<211>  27
<212>  DNA
<213>  Unknown

<220>
<223>  Derived from Adenovirus

<400>  8
gggggatccg aacttgttta ttgcagc
     27


<210>  9
<211>  25
<212>  DNA
<213>  Unknown

<220>
<223>  Derived from Adenovirus

<400>  9
gggagatcta gacatgataa gatac
     25


<210>  10
<211>  27
<212>  DNA
<213>  Unknown
```

<220>
<223> Derived from Adenovirus

<400> 10
gggagatctg tactgaaatg tgtgggc
     27

<210> 11
<211> 24
<212> DNA
<213> Unknown

<220>
<223> Derived from Adenovirus

<400> 11
ggaggctgca gtctccaacg gcgt
     24

<210> 12
<211> 27
<212> DNA
<213> Unknown

<220>
<223> Derived from Adenovirus

<400> 12
gggggatcct caaatcgtca cttccgt
     27

<210> 13
<211> 27
<212> DNA
<213> Unknown

<220>
<223> Derived from Adenovirus

<400> 13
ggggtctaga catcatcaat aatatac
     27

<210> 14
<211> 32
<212> DNA

<213>   Unknown

<220>
<223>   Derived from Adenovirus

<400>   14
ggcgaattcg tcgacatcat caataatata cc
     32

<210>   15
<211>   32
<212>   DNA
<213>   Unknown

<220>
<223>   Derived from Adenovirus

<400>   15
ggcgaattcg gtaccatcat caataatata cc
     32

<210>   16
<211>   17
<212>   DNA
<213>   Unknown

<220>
<223>   Derived from Adenovirus

<400>   16
ctgtgtacac cggcgca
     17

<210>   17
<211>   50
<212>   DNA
<213>   Unknown

<220>
<223>   Derived from Adenovirus

<400>   17
gtacactgac ctagtgccgc ccgggcaaag cccgggcggc actaggtcag
     50

<210>   18
<211>   50

<212> DNA
<213> Unknown

<220>
<223> Derived from Adenovirus

<400> 18
gtacctgacc tagtgccgcc cgggctttgc ccgggcggca ctaggtcagt
    50

<210> 19
<211> 55
<212> DNA
<213> Unknown

<220>
<223> Derived from Adenovirus

<400> 19
gtacattgac ctagtgccgc ccgggcaaag cccgggcggc actaggtcaa tcgat
    55

<210> 20
<211> 55
<212> DNA
<213> Unknown

<220>
<223> Derived from Adenovirus

<400> 20
gtacatcgat tgacctagtg ccgcccgggc tttgcccggg cggcactagg tcaat
    55

<210> 21
<211> 5620
<212> DNA
<213> Unknown

<220>
<223> Derived from Adenovirus

<400> 21
catcatcaat aatatacctt attttggatt gaagccaata tgataatgag ggggtggagt
    60

ttgtgacgtg gcgcggggcg tgggaacggg gcgggtgacg tagtagtgtg gcggaagtgt
    120

gatgttgcaa gtgtggcgga acacatgtaa gcgacggatg tggcaaaagt gacgtttttg
180

gtgtgcgccg gtgtacacag gaagtgacaa ttttcgcgcg gtttaggcg gatgttgtag
240

taaatttggg cgtaaccgag taagatttgg ccattttcgc gggaaaactg aataagagga
300

agtgaaatct gaataatttt gtgttactca tagcgcgtaa tatttgtcta gggccgcggg
360

gactttgacc gtttacgtgg agactcgccc aggtgttttt ctcaggtgtt ttccgcgttc
420

cgggtcaaag ttggcgtttt attattatag tcaggggctg caggtcgtta cataacttac
480

ggtaaatggc ccgcctggct gaccgcccaa cgaccccgc ccattgacgt caataatgac
540

gtatgttccc atagtaacgc caatagggac tttccattga cgtcaatggg tggagtattt
600

acggtaaact gcccacttgg cagtacatca agtgtatcat atgccaagta cgccccctat
660

tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc cagtacatga ccttatggga
720

ctttcctact tggcagtaca tctacgtatt agtcatcgct attaccatgg tgatgcggtt
780

ttggcagtac atcaatgggc gtggatagcg gtttgactca cggggatttc caagtctcca
840

ccccattgac gtcaatggga gtttgttttg gcaccaaaat caacgggact ttccaaaatg
900

tcgtaacaac tccgccccat tgacgcaaat gggcggtagg cgtgtacggt gggaggtcta
960

tataagcaga gctcgtttag tgaaccgtca gatcgcctgg agacgccatc cacgctgttt
1020

tgacctccat agaagacacc gggaccgatc cagcctccgg actctagagg atccggtact
1080

cgaggaactg aaaaaccaga aagttaactg gtaagtttag tcttttgtc ttttatttca
1140

Page 7

```
ggtcccggat ccggtggtgg tgcaaatcaa agaactgctc ctcagtggat gttgccttta
    1200

cttctagtat caagcttgaa ttcctttgtg ttacattctt gaatgtcgct cgcagtgaca
    1260

ttagcattcc ggtactgttg gtaaaatgga agacgccaaa aacataaaga aaggcccggc
    1320

gccattctat cctctagagg atggaaccgc tggagagcaa ctgcataagg ctatgaagaa
    1380

atacgccctg gttcctggaa caattgcttt tacagatgca catatcgagg tgaacatcac
    1440

gtacgcggaa tacttcgaaa tgtccgttcg gttggcagaa gctatgaaac gatatgggct
    1500

gaatacaaat cacagaatcg tcgtatgcag tgaaaactct cttcaattct ttatgccggt
    1560

gttgggcgcg ttatttatcg gagttgcagt tgcgcccgcg aacgacattt ataatgaacg
    1620

tgaattgctc aacagtatga acatttcgca gcctaccgta gtgtttgttt ccaaaaaggg
    1680

gttgcaaaaa attttgaacg tgcaaaaaaa attaccaata atccagaaaa ttattatcat
    1740

ggattctaaa acggattacc agggatttca gtcgatgtac acgttcgtca catctcatct
    1800

acctcccggt tttaatgaat acgattttgt accagagtcc tttgatcgtg acaaaacaat
    1860

tgcactgata atgaattcct ctggatctac tgggttacct aagggtgtgg cccttccgca
    1920

tagaactgcc tgcgtcagat tctcgcatgc cagagatcct attttttggca atcaaatcat
    1980

tccggatact gcgattttaa gtgttgttcc attccatcac ggttttggaa tgtttactac
    2040

actcggatat ttgatatgtg gatttcgagt cgtcttaatg tatagatttg aagaagagct
    2100

gtttttacga tcccttcagg attacaaaat tcaaagtgcg ttgctagtac caaccctatt
    2160
```

Page 8

ttcattcttc gccaaaagca ctctgattga caaatacgat ttatctaatt tacacgaaat
2220

tgcttctggg ggcgcacctc tttcgaaaga agtcggggaa gcggttgcaa aacgcttcca
2280

tcttccaggg atacgacaag gatatgggct cactgagact acatcagcta ttctgattac
2340

acccgagggg gatgataaac cgggcgcggt cggtaaagtt gttccatttt ttgaagcgaa
2400

ggttgtggat ctggataccg ggaaaacgct gggcgttaat cagagaggcg aattatgtgt
2460

cagaggacct atgattatgt ccggttatgt aaacaatccg gaagcgacca acgccttgat
2520

tgacaaggat ggatggctac attctggaga catagcttac tgggacgaag acgaacactt
2580

cttcatagtt gaccgcttga agtctttaat taaatacaaa ggatatcagg tggcccccgc
2640

tgaattggaa tcgatattgt tacaacaccc caacatcttc gacgcgggcg tggcaggtct
2700

tcccgacgat gacgccggtg aacttcccgc cgccgttgtt gttttggagc acggaaagac
2760

gatgacggaa aaagagatcg tggattacgt cgccagtcaa gtaacaaccg cgaaaaagtt
2820

gcgcggagga gttgtgtttg tggacgaagt accgaaaggt cttaccggaa aactcgacgc
2880

aagaaaaatc agagagatcc tcataaaggc caagaagggc ggaaagtcca aattgtaaaa
2940

tgtaactgta ttcagcgatg acgaaattct tagctattgt aatgggggat ccccaacttg
3000

tttattgcag cttataatgg ttacaaataa agcaatagca tcacaaattt cacaaataaa
3060

gcattttttt cactgcattc tagttgtggt ttgtccaaac tcatcaatgt atcttatcat
3120

gtctggatcg gatcgatccc cgggtaccga gctcgaattc gtaatcatgg tcatagctgt
3180

ttcctgtgtg aaattgttat ccgctcacaa ttccacacaa catacgagcc ggaagcataa
3240

agtgtaaagc ctggggtgcc taatgagtga gctaactcac attaattgcg ttgcgctcac
3300

tgcccgcttt ccagtcggga aacctgtcgt gccagctgca ttaatgaatc ggccaacgcg
3360

cggggagagg cggtttgcgt attgggcgct cttccgcttc ctcgctcact gactcgctgc
3420

gctcggtcgt tcggctgcgg cgagcggtat cagctcactc aaaggcggta atacggttat
3480

ccacagaatc agggggataac gcaggaaaga acatgtgagc aaaaggccag caaaaggcca
3540

ggaaccgtaa aaaggccgcg ttgctggcgt ttttccatag gctccgcccc cctgacgagc
3600

atcacaaaaa tcgacgctca agtcagaggt ggcgaaaccc gacaggacta taaagatacc
3660

aggcgtttcc ccctggaagc tccctcgtgc gctctcctgt tccgaccctg ccgcttaccg
3720

gatacctgtc cgcctttctc ccttcgggaa gcgtggcgct ttctcatagc tcacgctgta
3780

ggtatctcag ttcggtgtag gtcgttcgct ccaagctggg ctgtgtgcac gaaccccccg
3840

ttcagcccga ccgctgcgcc ttatccggta actatcgtct tgagtccaac ccggtaagac
3900

acgacttatc gccactggca gcagccactg gtaacaggat tagcagagcg aggtatgtag
3960

gcggtgctac agagttcttg aagtggtggc ctaactacgg ctacactaga aggacagtat
4020

ttggtatctg cgctctgctg aagccagtta ccttcggaaa aagagttggt agctcttgat
4080

ccggcaaaca aaccaccgct ggtagcggtg gttttttgt ttgcaagcag cagattacgc
4140

gcagaaaaaa aggatctcaa gaagatcctt tgatcttttc tacggggtct gacgctcagt
4200

```
ggaacgaaaa ctcacgttaa gggattttgg tcatgagatt atcaaaaagg atcttcacct
4260

agatcctttt aaattaaaaa tgaagtttta aatcaatcta aagtatatat gagtaaactt
4320

ggtctgacag ttaccaatgc ttaatcagtg aggcacctat ctcagcgatc tgtctatttc
4380

gttcatccat agttgcctga ctccccgtcg tgtagataac tacgatacgg gagggcttac
4440

catctggccc cagtgctgca atgataccgc gagacccacg ctcaccggct ccagatttat
4500

cagcaataaa ccagccagcc ggaagggccg agcgcagaag tggtcctgca actttatccg
4560

cctccatcca gtctattaat tgtttgccgg aagctagagt aagtagttcg ccagttaata
4620

gtttgcgcaa cgttgttgcc attgctacag gcatcgtggt gtcacgctcg tcgtttggta
4680

tggcttcatt cagctccggt tcccaacgat caaggcgagt tacatgatcc cccatgttgt
4740

gcaaaaaagc ggttagctcc ttcggtcctc cgatcgttgt cagaagtaag ttggccgcag
4800

tgttatcact catggttatg gcagcactgc ataattctct tactgtcatg ccatccgtaa
4860

gatgcttttc tgtgactggt gagtactcaa ccaagtcatt ctgagaatag tgtatgcggc
4920

gaccgagttg ctcttgcccg gcgtcaatac gggataatac cgcgccacat agcagaactt
4980

taaaagtgct catcattgga aaacgttctt cggggcgaaa actctcaagg atcttaccgc
5040

tgttgagatc cagttcgatg taacccactc gtgcacccaa ctgatcttca gcatctttta
5100

ctttcaccag cgtttctggg tgagcaaaaa caggaaggca aaatgccgca aaaaagggaa
5160

taagggcgac acggaaatgt tgaatactca tactcttcct ttttcaatat tattgaagca
5220
```

```
tttatcaggg ttattgtctc atgagcggat acatatttga atgtatttag aaaaataaac
   5280

aaataggggt tccgcgcaca tttccccgaa aagtgccacc tgacgtctaa gaaaccatta
   5340

ttatcatgac attaacctat aaaaataggc gtatcacgag gcctatgcgg tgtgaaatag
   5400

cgcacagatg cgtaaggaga aaataccgca tcaggcgcca ttcgccattc aggctgcgca
   5460

actgttggga agggcgatcg gtgcgggcct cttcgctatt acgccagctg gcgaaagggg
   5520

gatgtgctgc aaggcgatta agttgggtaa cgccagggtt ttcccagtca cgacgttgta
   5580

aaacgacggc cagtgccaag cttgcatgcc tgcaggtcga
   5620
```

```
<210>    22
<211>    45
<212>    DNA
<213>    Unknown

<220>
<223>    Derived from Adenovirus

<400>    22
gtacactgac ctagtgccgc ccgggcaaag cccccgcggc actag
    45
```